#### STATE OF MICHIGAN

#### BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

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In the matter of the application of CONSUMERS POWER COMPANY for a certificate of public convenience and necessity for the Marsac Creek Gas Storage Field.

Case No. U-4949

At a session of the Michigan Public Service Commission held at its offices in the city of Lansing, Michigan, on the 21st day of June, 1976.

PRESENT: Hon. Daniel J. Demlow, Chairman

Hon. Lenton G. Sculthorp, Commissioner Hon. William R. Ralls, Commissioner

# ORDER ADOPTING PROPOSAL FOR DECISION AND GRANTING CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY

On October 15, 1975, Consumers Power Company (Applicant) filed an application for a certificate of public convenience and necessity pursuant to Section 2, 1923 PA 238, as amended, being MCLA 486.252.

Under the provisions of MCLA 486.252, the Commission must make two determinations. First, the Commission must determine that the present and future public convenience and necessity will be served by the acquisition of property for use as a natural gas storage field. Second, the Commission must determine that the field is safe for development and the operation of gas storage.

In the discharge of its statutory duty, the Commission noticed the above-entitled matter for hearing, which hearing was commenced on December 17, 1975 and concluded on February 20, 1976.

A Proposal for Decision (PFD) was issued on May 12, 1976, recommending that the application be approved. No exceptions to the PFD were filed.

After a review of the record in this matter, the Commission FINDS that:

- a. Jurisdiction is pursuant to Section 2, 1923 PA 238, as amended, MCLA 486.252;
  1969 PA 306, as amended, MCLA 24.201 et seq.; 1969 PA 165, as amended, MCLA 483.151
  et seq.; and the Commission's Rules of Practice and Procedure, 1954 Administrative
  Code, Supplement No. 54, R 460.11 et seq.
  - b. The present or future public convenience and necessity requires the acquisition by Applicant of property or interest in that area known as the Marsac Creek Field, located in Sections 19, 20, 29 and 30 of Casco Township, St. Clair County.
    - c. The Marsac Creek Field is safe for development and operation of gas storage.
    - d. The requirements of Executive Order 1974-4 have been met.

# THEREFORE, IT IS ORDERED that:

- A. The Proposal for Decision issued on May 12, 1976, and attached hereto as Exhibit A, is hereby adopted and made a part of this order.
- B. A certificate is hereby granted to Consumers Power Company, pursuant to the provisions of Section 2, 1923 PA 238, as amended, MCLA 486.252, to acquire property or interest in that area known as the Marsac Creek Field, located in Sections 19, 20, 29 and 30 of Casco Township, St. Clair County, Michigan.
- C. The Marsac Creek Field shall be developed and operated by Applicant as a gas storage field with a maximum allowable operating pressure of 1,440 psig at the well-head.
- D. The development and operation of the Marsac Creek Storage Field by Applicant shall remain subject to such orders and continuing supervision, including filing of reports, as from time to time are required by this Commission.

The Commission specifically reserves jurisdiction of the matters herein contained and the authority to issue such further order or orders as the facts and circumstances may require.

MICHIGAN PUBLIC SERVICE COMMISSION

( S E A L )

/s/ Daniel J. Demlow Chairman

/s/ Lenton G. Sculthorp
Commissioner

/s/ William R. Ralls
Commissioner

By the Commission and pursuant to its action of June 21, 1976.

/s/ Earl B. Klomparens
Its Secretary

# STATE OF MICHIGAN

# BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

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In the Matter of the Application of CONSUMERS POWER COMPANY for a Certificate of Public Convenience and Necessity for the Marsac Creek Gas Storage Field

Case No. U-4949

### PROPOSAL FOR DECISION

On October 15, 1975, Consumers Power Company (Applicant), a Michigan Corporation organized and authorized to engage as a public utility in the production, manufacture, storage, transmission, distribution and sale to the public of natural gas, filed an application with this Commission pursuant to and under the provisions of Section 2 of 238 of the P.A. of 1923, as amended, MCLA 486.252, for a certificate that the present or future public convenience and necessity requires or will require the acquisition of certain property or interests therein located in St. Clair County, Michigan for use as a natural gas storage field.

On November 10, 1975, the Commission issued a Notice of Hearing on the aforementioned application, setting December 17, 1975 for the commencement of a public hearing. The notice further contained the representations made in the application and the relief which is sought by Applicant. The notice also directed Applicant to give notice of the hearing to interested parties by registered mail and by publication of the notice in a newspaper printed or circulated in Casco Township, St. Clair County, Michigan.

Applicant effected service upon the interested parties and the publication smade, as shown by its Proof of Service and an Affidavit of Publication filed on

November 25, 1975 and December 9, 1975, respectively. Petitions to Intervention, under Rule 11 of the Rules of Practice and Procedure before the Commission, were filed on behalf of Stanley and Julia Jablonski, Warren Tetlow, Edna Tetlow, Gerald Tetlow, Laura Tetlow, Lloyd Granzow, Doris Granzow, Edna Granzow, Beatrice Woehlert, Kenneth Suess, Lilly Suess, Lloyd Suess, Doris Suess, Donna Jesse, Donald Jesse, Janet Hill, William Hill, Roland Seuss, Grace Suess, George Suess, Ellen Suess and Julia P. Carr.

Although not specifically objecting to the Petition to Intervene of the following parties; Gerald Tetlow, Laura Tetlow, Lloyd Suess, Doris Suess, Donna Jesse, Donald Jesse, Janet Hill, William Hill, Roland Suess, Grace Suess, George Suess and Ellen Suess, the Applicant questioned whether they had sufficient interest that Applicant would have to condemn or be required to serve notice on them. Because the named parties had an interest in land within the area encompassed by the proposed Marsac Creek Gas Storage Field, the Administrative Law Judge allowed all of the Petitions to Intervene with the reservation that no ruling was made as to condemnable interest or condemnation, but that the Petitions to Intervene were allowed only as far as the parties do have sufficient interest in the land to allow them to intervene in the proceedings on the application for a Certificate of Public Convenience and Necessity.

Hearings were held on December 17, 1975 and February 20, 1976. Applicant presented two witnesses and seven exhibits in support of its application. The Staff presented one witness who supported the application. The Intervenors offered no testimony or exhibits in support of their position, but did cross-examine the witnesses for Applicant and Staff.

# APPLICABLE STATUTE

Applicant's request was filed pursuant to the provisions of Section 2 of Act 238, A. of 1928, as amended, (MCLA 486.252). That Act gives certain corporations (clearly

encompassing Applicant) the right to condemn lands and any and all interests therein "which may be necessary ...for an underground natural gas storage field." Such condemnation rights are exercised by petition addressed to the Probate Court for the county in which the land, or interest therein, to be condemned is located.

However, Section 2 also provides that the petition filed in the Probate Court:

"shall also contain the allegation that a certificate has been obtained from the public service commission that the present or future public convenience and necessity require the acquiring of any property or interest therein for use as a natural gas storage field. Upon application being filed with the public service commission for a certificate required by this section, the commission shall set the matter for hearing and shall give reasonable notice of the hearing thereon to all interested parties as in commission's judgment may be necessary under rules prescribed by the commission...Before any certificate is granted, the commission shall examine and inquire into the necessity of the natural gas storage field and determine that the natural gas storage field will serve the present or future public convenience and necessity, and that the field is safe for development and operation of gas storage. The granting of a permanent or temporary certificate by the commission pursuant to this section constitutes a prima facie case in any court of this state and that the natural gas storage field so certified is required by the public convenience and necessity."

The Commission's examination and inquiry is, therefore, confined to two questions:

- Whether the proposed natural gas storage field is necessary and will serve the present or future public convenience and necessity, and,
- (2) Whether the proposed field is safe for development and operation of gas storage.

# STATEMENT OF FACTS

# Public Convenience and Necessity

Applicant stated that their gas supplies are received at virtually a 100 percent load factor, that is in equal daily amounts throughout the year, however, their loads vary throughout the year according to the weather and storage fields allow them

to balance load against supply storage operations are designed to handle seasonal variations based on an 11% colder than normal winter.

Applicant presently distributes and sells natural gas in this state to over 958,000 customers located in 788 communities in an area of approximately 13,000 square miles with a total population of nearly four million people.

Applicant receives the gas it distributes from Panhandle Eastern Pipe Line

Company, (Panhandle)(through Storage Company), Trunkline Gas Company (Truckline), its Marysville plant occasional spot purchases and small quantities of native production. Through Storage Company, Applicant's contract with Panhandle calls for annual deliveries of 92.5 Bcf, with the major portion of the deliveries coming in the summer months. Its contract with Trunkline Gas Company calls for daily deliveries of 700,000 Mcf. ilts Marysville plant is currently producing gas at the rate of 200,000 Mcf per day. Additionally, Applicant is under increasing supply curtailments from its pipeline suppliers, with most of the curtailments coming in the winter months. Curtailment of gas from these sources are currently running at the rate of around 115 billion cubic feet per year, and are expected in 1976 to be nearly 140 billion cubic feet, or about 40 percent of total contract quantities. Thus while the major demand upon Applicant's system occurs in the winter months, the major portion of its gas supplies are received in the remaining months and must be stored. Applicant attempted to reduce its need for cold weather reserves by establishing a seasonal rate, allowing it to interrupt service to certain customers. However, the curtailments from its suppliers have caused Applicant to use these interruptions to balance its load, and Applicant can no longer depend on these interruptions to provide flexibility for cold weather and must look to storage for such flexibility.

Applicant testified that it has been able to make "spot purchases" of gas in

the past and it believes "spot purchases" will be available in the future. Applicant stated that such spot purchases are generally only available in the summer months, when suppliers of gas occasionally have a surplus. Therefore, Applicant must have storage capacity to avail itself of such spot purchases, because it can no longer design for storage capacity as tightly as it could in the past.

Applicant stated that it intends to use the Marsac Creek Storage Field as a base load field as compared to a peaking field. Current plans are to initially cycle 2.3 billion cubic feet per year and in the future to cycle up to 3.3 billion cubic feet through the field. Withdrawal rates will range from 10-75 million cubic feet per day during the November to April withdrawal period. Injection rates will range from 30-75 million cubic feet during the summer injection period. The Marsac Creek Field is very close to Applicant's other St. Clair area fields namely, Puttygut, Ira, Lenox, Four Corners, Swan Creek and Ray, and thus is convenient to Applicant's existing gas distribution system.

During the 1960's Applicant's annual load growth was approximately 25 billion cubic feet per year as contrasted to a current load growth of only 3 billion cubic feet per year. However, under present restrictions on new loads, the Applicant is adding only residential customers who use the gas for space heating which use has a low load factor. Applicant stated that over the years this will decrease its average load factors and increase the demands for storage capacity despite the restricted growth.

The Staff testified that adequate storage facilities are in the public interest because the facilities permit the pipeline suppliers to operate at close to 100% of capacity and thus reduce the cast to the distributing utility. The presence of gas storage facilities has been instrumental in keeping the price of gas to Michigan consumers very low. The Staff further stated that to play and abandon a depleted field

would be economic waste when the field is suitable for conversion to storage and the Applicant has the need for additional storage.

#### STATEMENT OF FACTS

# Safety

Both Applicant and Staff presented testimony by qualified experts on the question of the safe development and operation of the proposed gas storage reservoir in the Marsac Creek Field.

The Marsac Creek Field was formerly an operating-producing dry gas and oil field which produced approximately 3.9 billion cubic feet of gas and 1779 barrels of oil since January, 1967. It is located in a rural-agricultural area and operated during its production years with no material adverse environmental impact. The Marsac Creek Field was described as being a Salina Niagran reef. The reef is a stratigraphic trap composed of porous and permeable dolomite with a maximum pay thickness of approximately 248 feet. The reef crest is at an approximate depth of 2447 feet. Within the reef is a free gas zone which is present in the reef until a gas-water contact is found at an approximate depth of 2701 feet. Immediately above the A-1 Carbonate which overlies the reef itself is the Salina A-2 Anhydrite which has been characterized as a "super caprock" by Ibrahim, Tek and Katz in their report "Threshold Pressure in Gas Storage", published by the American Gas Association in 1971.

Applicant's existing gas gathering system will be utilized in storage operations. It will only be necessary to connect the existing gathering system to the Applicant's existing storage facilities by means of a piping modification which will be accomplished within the Applicant's existing Stripping Plant site located in Section 31, T4N-R15E, Casco Township, St. Clair County.

The field would have a maximum allowable operating pressure of 1440 ps ig at the wellhead and the pressure in the reservoir will not exceed the threshold pressure of the caprock and attendant gas migration will not occur.

Applicant proposes to convert the 3 producing gas wells into facility wells, 2 of the dry holes into observation wells, the oil well to an observation well and 1 shut in gas well to an observation well. Five dry holes within the storage area will be replugged to preserve the integrity of the field. The 2 dry holes to be used for observation wells will be reentered, cased and equipped with wellheads. The oil well and the shut-in gas well will be mechanically inspected for casing corrosion and the cement bond will be verified prior to conversion to observation status. The 5 dry holes to be replugged will have a cement plug placed from a total depth to 200 feet above the A-2 Anhydrite Formation. The opinion of both witnesses, standing uncontraverted on the record, was that the field could be safely used as a gas storage facility by accomplishing the above described work. In addition the field has been producing gas since 1967 with no evidence of gas migration.

#### DISCUSSION OF ISSUES

The Intervenors did not present any evidence, or submit oral argument or written briefs, so it is difficult if not impossible to determine their position in regards to the application.

As to the necessity for the use of the Marsac Creek Field for gas storage the Intervenors questioned the witnesses as to the efficient use of its present gas storage fields and the availability of gas storage from Michigan Consolidated Gas Company. However, the cross-examination elicited no evidence that the Applicant's present gas storage facilities are not being used to their full efficient capacity or that gas storage savailable from Michigan Consolidated Gas Company now or in the reasonable future.

It is clear from the record in this case that the use of gas storage facilities in this state is in the public interest in that it assists Applicant to balance its load, makes gas available to it which otherwise it would not otherwise be able to accept and results in lower costs for its gas supply.

The record further supports that the curtailments by Applicant's suppliers and the seasonal nature of the residential space heating load which is the only new customer being accepted by Applicant increase the necessity for the Applicant to add gas storage facilities.

#### CONCLUSIONS

The Administrative Law Judge finds that it is necessary for Applicant to acquire the Marsac Creek Field for use as a natural gas storage field.

The Administrative Law Judge finds that the use of the Marsac Creek Field for gas storage will serve the present and future public convenience and necessity.

The Administrative Law Judge finds that the Marsac Creek Field is safe for development as a gas storage field.

#### PROPOSED DECISION

Therefore in view of the findings and conclusions contained herein the Administrative Law Judge recommends that the application be approved and that the Commission issue an order substantially in compliance with this Proposal for Decision.

May 10, 1976 Lansing, Michigan

CHARLES T. SHERIDAN

Administrative Law Judge

ISSUED AND SERVED:

May 12, 1976